Terminal Doppler Weather Radar (TDWR) Information

The Terminal Doppler Weather Radar (TDWR) is a high quality, dedicated meteorological surveillance radar deployed near many of the larger airports in the U.S. The Federal Aviation Administration (FAA) installed TDWRs near the largest airports which were vulnerable to wind shear conditions (thunderstorms, frontal passages, etc.). The TORD TDWR is located 13 miles south of Chicago O'Hare International Airport. The TMDW TDWR is located 9.5 miles south of Chicago Midway International Airport.

Comparison of the TDWR to the WSR-88D

The below table shows a comparison of technical specifications between the TDWR and the NWS Weather Surveillance Radar, 1988 Doppler (WSR-88D).

	WSR-88D	TDWR
Wavelength	10 cm	5 cm
Volume Scan Time	4 minutes in VCP 12	1 min at 0.3 degree
Beam Width	1.25 degrees	0.5 degrees
Range Gate	.13 nm in velocity .13 nm in reflectivity	.067 nm
Max Range	230 km	90 km

Some of the greatest advantages of the TDWR is its higher temporal resolution, its finer spatial resolution at times can help identify specific features (including non-meteorological), and it can simply offer another vantage point of a storm which can be helpful in the Doppler data. Common limitation are beam blocking, beam attenuation, a high amount of ground clutter at its lowest angle.

Where to View the Data

As of September 2013, the NWS Experimental Ridge Radar website provides TDWR data. Follow the below links to visit area TDWR data:

- **TORD**
- **TMDW**